CROSS SECTION THROUGH SEPTIC SYSTEM ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE PER CMR 310 15.221(12) TOP OF FOUNDATION = 108.90 CAP AT GRADE MAINTAIN MINIMUM 2% SLOPE FINISH GRADE = 108.2± (OVER PIPE) OVER TOP OF SYSTEM FINISH GRADE = 106.6 MIN. OVER BED INSPECTION PORT-FINISH GRADE = 108.1 MIN. OVER TANK RISER & COVER TO GRADE WITH INTERIOR COVER LEFT IN PLACE. 12" MINIMUM / 36" MAXIMUM 12" MINIMUM / 36" MAXIMUM EARTH BACK FILL (TYPICAL) EARTH BACK FILL 4" SCH. 40 PVC SCHD. 40 SLOPE = 2.00% MIN 4" SCHD. 40 PIPE S=1.00% MIN. 4" SOLID PVC PIPE 2" OF 1/8" - 1/2" DOUBLE WASHED STONE PVC OR CAST IRON PIPE SANITARY TEES INTERCONNECT ENDS EFFECTIVE WITH 4" SOLID PVC. 3/4" - I-I/2" DIAM DOUBLE WASHED STONE INSTALL ZABEL A1800 RESIDENTIAL FILTER PRECAST CONCRETE BASE ELEV=104.3 - 2'-l- 5 PIPES @ 6' O.C. ------ 2 DISTRIBUTION BOX INSTALL GAS BAFFLE TYPICAL LEACHING FIELD BED 4' MIN. SEPARATION > 2 MPI CROSS-SECTION SCARIFIED EXISTING MATERIAL OR SAND/GRAVEL BACK FILL NOTE: SEPTIC TANK AND D-BOX TO BE INSTALLED GWT ELEV = 100.3 (60" GWT) PLACED IN ACCORDANCE WITH [CONSTRUCTION IN FILL] NOTE ON MINIMUM 6" COMPACTED CRUSHED STONE BASE BOTTOM OF EXCAVATION MINIMUM 48"± TO BASE ELEV = 97.0± HIGHEST EXISTING GRADE = 105.3, 60" GWT ELEV = 100.3 @ SOIL ABSORPTION SYSTEM TO SET DESIGN GWT ELEVATION PRECAST CONCRETE 1500 GALLON SEPTIC TANK LOWEST EXISTING GRADE = 101.0 @ SOIL ABSORPTION SYSTEM TO SET MINIMUM EXCAVATION ELEVATION FOUNDATION DRAIN R=228.00 8" PERFORATED HDPE PIPE -L=100.96 IN A 12" x 12" TRENCH WITH 3/4" GRAVEL RAPPED IN 8"HIGHXI8"WIDEXI2"DEEF DIAMOND PRO BLOCK FILTER FABRIC DRAINED TO DAYLIGHT @ INV=96.0 PLACED NO HIGHER THAN COMPLETELY WITH FR DRAINING AGGREGATE 2' BELOW BASEMENT SLAB WITH PIPE PITCH = 0.005 MIN. VARIES SEE PLAN VIEW) BM NAIL SET IN 15 INCH OAK TREE ELEV = 109.89 RIM = 96.9916" MIN. @ 12-6:1 EXISTING CURB STOP PER TOWN RECORD RIM = 96.22L=196.35,-10-24" B DRIVEWAY GARAGE SLAB = 107.40 0-I2" A 12-36" B 36-120" C 24-120" C AP 28 LOT 154 20' x 38' POOL WF B12<u>⊼</u> `^B.V.W. 0-l2" A 12-36" B PROTECTED AREA AREA OF DISTURBANCE HAY BALE AND POST (TYP.) WF B3 IN AREAS SHOWN ON PLAN 6" MINIMUN - 6'-0" MIN. --UNLESS NOTED DH (FND) OTHERWISE I. HAY BALES ARE TO BE PLACED WITHIN A 6" MINIMUM TRENCH PRIOR TO CONSTRUCTION. 2. THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO THE TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICES. LEGEND 3. BALE STRING SHALL BE LAID PARALLEL TO THE GROUND SURFACE. SOIL TEST PIT 4. EACH BALE TO BE SECURELY STAKED INTO THE GROUND

EXISTING CONTOUR

WETLANDS LINE

PROPOSED CONTOUR

EXISTING SPOT ELEVATION

PROPOSED SPOT ELEVATION

25' WETLAND BUFFER ZONE

50' WETLAND BUFFER ZONE

100' WETLAND BUFFER ZONE

COLOR LEGEND

x63.2

 $\times 60.8$

GRAPHIC SCALE

1 INCH = 20 FEET

WITH (2) I"xI"x3' OAK BEAN POLE.

STABILIZE.

5. CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF

6. EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS

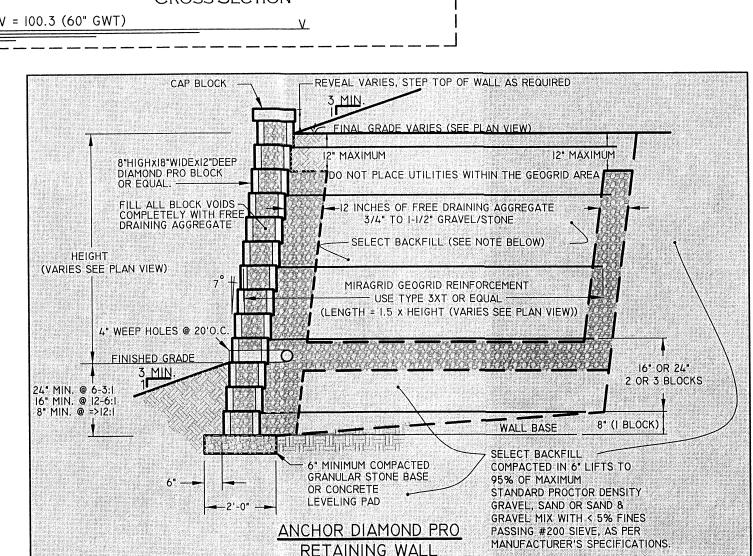
7. LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM

& SEED UNTIL GERMINATION AND STABILATION OCCURS.

HAY BALE DETAIL

(NOT TO SCALE)

HAY BALE LINE FOR DURATION OF CONSTRUCTION.



(NOT TO SCALE)

OVERDIG

(TYP)

MAINTAIN FOR 5' AROUND

40 MIL POLY. BARRIER AT

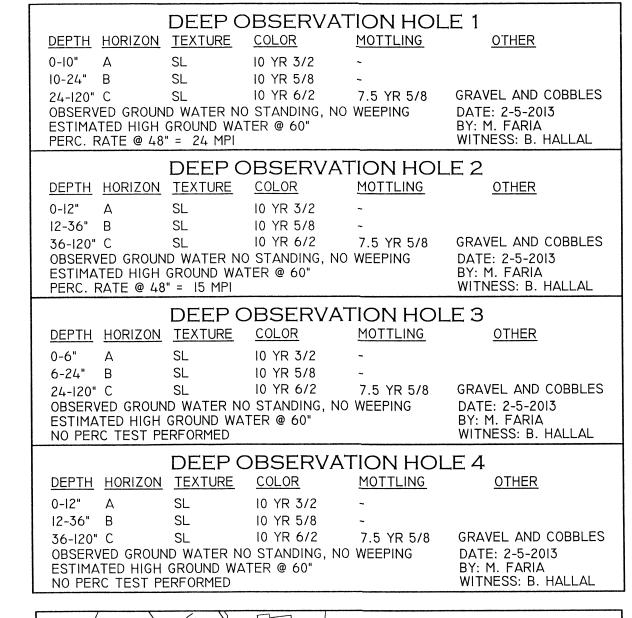
10' CONTINUOUS WITH WATER TIGHT SEAMS PLACED AS SHOWN IN THE PLAN VIEW.

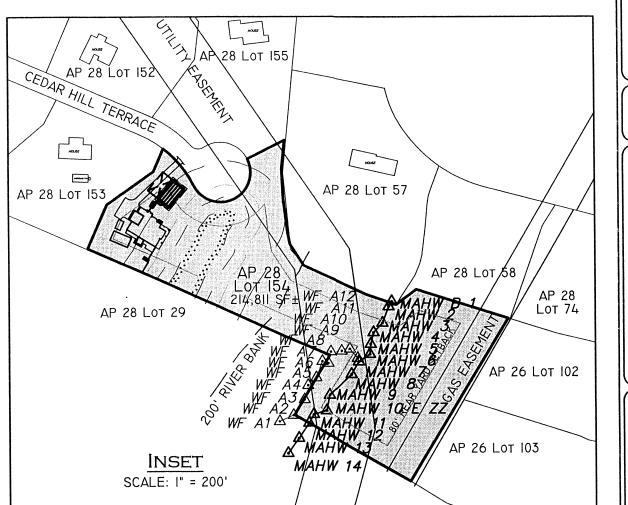
101.6 BOTTOM OF POLY. BARRIER

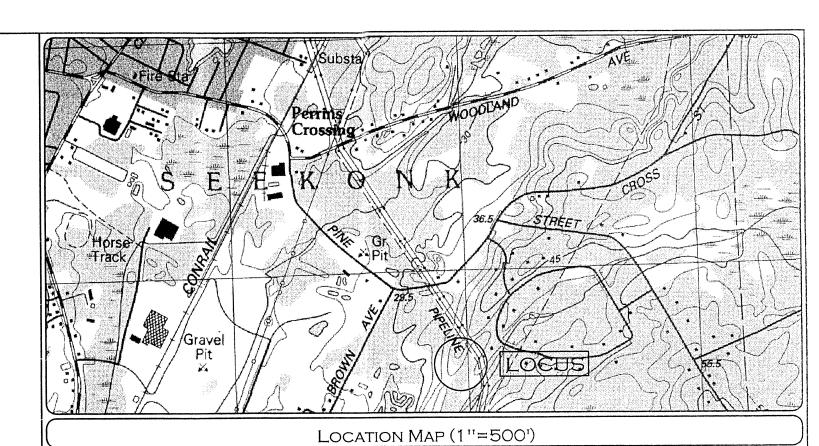
AT TOP POLY. BARRIER

AND MAINTAIN FOR 15' AROUND AS SHOWN TOP OF STONE

ELEVATION 105.6







NOTES & SPECIFICATIONS

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR 15 (TITLE V) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN BOARD OF HEALTH.

THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

THE SEPTIC TANK AND DISTRIBUTION BOX SHALL BE STANDARD DUTY (H-IO) OR HEAVY DUTY (H-20) IF LOCATED UNDER A DRIVEWAY.

ALL PIPING SHALL BE 4" DIA. SCHD. 40 NSF PVC, WITH ALL JOINTS SEALED WATERTIGHT. ALL STONE SHALL BE DOUBLE WASHED AND FREE OF IRONS, CLAY OR FINES AND

SHALL BE SATISFACTORY TO THE TOWN BOARD OF HEALTH.

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.

THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WITHIN 100 FEET (RADIAL) OF THE PROPOSED SYSTEM. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. EXCAVATE ALL TOP, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE BOTTOM OF EXCAVATION (SEE CROSS SECTION) FOR A HORIZONTAL DISTANCE OF 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACK FILL TO TOP OF STONE ELEVATION WITH SELECT ON SITE OR IMPORTED SOIL MATERIAL CONSISTING OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SIEVE SIZE REQUIREMENTS

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON AN ASSUMED DATUM.

OF 310 CMR 15.255(3) & (5) [CONSTRUCTION IN FILL].

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF CONSTRUCTION.

WATER TABLE FLUCTUATES ANNUALLY, NO WARRANTEE OF A DRY BASEMENT IS EXPRESSED OR IMPLIED.

THE PROPOSED WORK DOES NOT LIE IN A CRITICAL FLOOD HAZARD ZONE.

THE LOT DOES LIE IN AN OVERLAY DISTRICT FOR GROUNDWATER AQUIFER PROTECTION.

THE CONTRACTOR IS TO VERIFY THE BENCHMARK WITH THE SURVEYOR PRIOR TO CONSTRUCTION. MAINTAIN 15' MINIMUM SEPARATION FROM WATER SERVICE TO PROPOSED SEPTIC COMPONENTS. HOUSE DIMENSIONS, ELEVATION AND LOCATION ARE APPROXIMATE AND SUBJECT TO CHANGE, CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

THE LOT LIES IN A R-4 ZONING DISTRICT

FRONT YARD SETBACK: 50' SIDE YARD SETBACK: 35' (I STORY CABANNAN)

SIDE YARD SETBACK: 35' + 5'/STORY = 40' (2 STORY MAIN HOUSE)

I CERTIFY THAT THE PROPOSED WATER SERVICE SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SEEKONK WATER DISTRICT. THE CONTRACTOR IS TO COORDINATE THE WATER SERVICE TIE IN WITH THE WATER AUTHORITY AND INSTALL THE WATER SERVICE WITH MAGNETIC MARKING TAPE ABOVE THE ENTIRE LENGTH OF THE WATER SERVICE.

THE SPLIT RAIL FENCE WILL SERVE AS THE LIMIT OF LAWN AND FUTURE YARD ACTIVITIES AND SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.

THE 25-FOOT BUFFER ZONE DELINEATES THE LIMITS OF DISTURBANCE AND ALL FUTURE ACTIVITIES THE 50-FOOT WETLAND BUFFER DELINEATES THE LIMITS OF ALL STRUCTURES AS STATED WITHIN

THE TOWN OF SEEKONK CONSERVATION COMMISSION REGULATIONS AMENDED MARCH, 2003. WETLANDS DELINEATED BY BRANDON FANEUF OF ECOSYSTEM SOLUTIONS, INC.

DESIGN CALCULATIONS

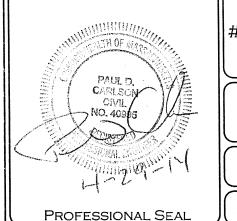
AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY) 5 BEDROOM DWELLING @ 110 GPD PER BEDROOM = 550 GPD SEPTIC TANK SIZING (GALLONS) 200% AVERAGE DAILY FLOW = 2 (550) = 1100 GALLONS 5 BEDROOM HOME REQUIRES 1500 GALLON TANK (MINIMUM). DESIGN SOIL TYPE AND PERCOLATION RATE

SOIL CLASS II PERC RATE IN TPI WAS 24 MPI & TP2 WAS 15 MPI

DESIGN FOR 25 MPI PER TITLE V REQUIRED MINIMUM LEACHING AREA:

REQUIRED AREA = 550 GPD / 0.40 GPD / SF = 1,375 SF MINIMUM LEACHING FIELD BED: 28' x 50' = 1,400 SF RESERVE AREA: 28' x 50' = 1,400 SF

"SEPTIC SYSTEM DESIGN AND NOI PLAN"



"CEDAR HILL TERRACE" #65 CEDAR HILL TERRACE, SEEKONK, MASSACHUSETTS 02771 ASSESSORS MAP 28 LOT 154

OWNER: MICHAEL G. BAKER 225 Cross Street, Seekonk, Massachusetts 02771

Scale: DESIGN BY: DATE: 13-003 1'' = 20'MSF FEBRUARY 18, 2014

REVISED: APRIL 29, 2014 (NOI, LABELED RETAINING WALLS AND PATIO AREA)



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OF 1

SHEET